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(71) Applicant (for all designated States except US): **FUJI PHOTO FILM CO., LTD.** [JP/JP]; 210, Nakanuma, Minami-Ashigara-shi, Kanagawa 2500123 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KANO, Takeyoshi** [JP/JP]; c/o FUJI PHOTO FILM CO., LTD., 200, Ohnakazato, Fujinomiya-shi, Shizuoka 4180044 (JP). **KAWAMURA, Koichi** [JP/JP]; c/o FUJI PHOTO FILM CO., LTD., 200, Ohnakazato, Fujinomiya-shi, Shizuoka 4180044 (JP).

(74) Agents: NAKAJIMA, Jun et al.; TAIYO, NAKAJIMA & KATO, Seventh Floor, HK-Shinjuku Bldg., 3-17, Shinjuku 4-chome, Shinjuku-ku, Tokyo 1600022 (JP).

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(54) Title: METAL PATTERN FORMING METHOD, METAL PATTERN OBTAINED BY THE SAME, PRINTED WIRING BOARD, CONDUCTIVE FILM FORMING METHOD, AND CONDUCTIVE FILM OBTAINED BY THE SAME

Interface of plating (catalyst) layer/ polymer layer



Electroplating layer
Electroless plating layer
Organic/Inorganic hybrid layer

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(57) Abstract: The present invention provides a method of forming a metal pattern and a metal pattern obtained by the method. The method includes the steps of (I) forming on a substrate a polymer layer in which a polymer having a functional group that interacts with an electroless plating catalyst or a precursor thereof is chemically bonded directly to the substrate in a pattern form, (II) adding the electroless plating catalyst or precursor thereof to the polymer layer, and (III) forming a metal layer in the pattern form by electroless plating. The present invention also provides a method of forming a conductive film, including the steps of (A) forming on a substrate a polymerization initiating layer in which a polymer having, on a side chain thereof, a crosslinking group and a functional group having polymerization initiating capability is immobilized by a crosslinking reaction on the surface of the base material, (B) generating a graft polymer by chemically bonding a polymer having a functional group that interacts with an electroless plating catalyst or a precursor thereof directly onto the entire surface of the polymerization initiating layer, (C) adding the electroless plating catalyst or precursor thereof to the graft polymer, and (D) forming a metal layer by electroless plating.



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